

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: LUMIERE

Report Number: P27782[\_30000K

Luminaire Tested: 696-8LED3025-12-BK-LSL

Issue Date: 3/3/2020

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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**Test Information**

Test Method: LM-79-2019  
 Report Number: P27782[\_30000K  
 Test Lab: INNOVATION CENTER(G2)  
 Issue Date: 3/3/2020  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: LUMIERE  
 Catalog Number: 696-8LED3025-12-BK-LSL  
 Description: BOCA 696, 8 WATT, 3000K CCT, 25 DEGREE NARROW  
 OPTIC, FLUSH HOOD BLACK, LINEAR SPREAD LENS  
 Light Source: (1) SORAA 3000K 90 CRI 25° NFL  
 SM16-07-25D-930-03  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 379.3 lumens  
 Efficiency: N/A  
 Efficacy: 48.6 lumens/watt  
 N/A  
 Luminous Opening: Circular (Dia: 0.17' x H: 0')  
 CIE Type: Indirect  
  
 Input Watts (W): 7.8  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 24 FT

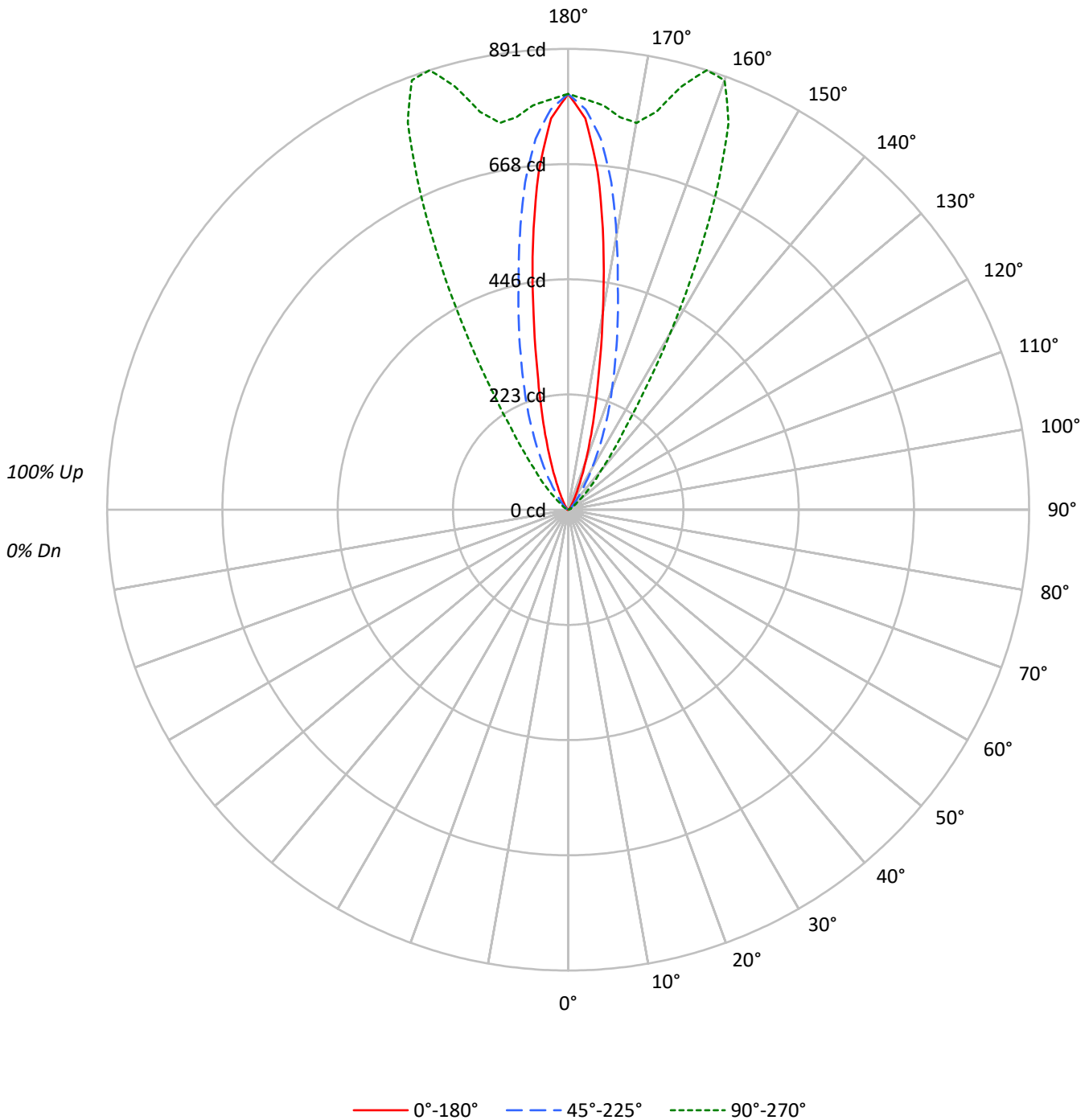


Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0																												
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0																												
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0																												
3	72	63	57	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0																												
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0																												
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0																												
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0																												
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0																												
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0																												
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0																												
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
95°	0	0	0
100°	2829	0	0
105°	1898	1898	1898
110°	2873	2873	4309
115°	3487	3487	5945
120°	2947	4042	7981
125°	3524	5236	12194
130°	3908	6973	20146
135°	4248	9891	37408
140°	5851	16905	63136
145°	7339	28619	115082
150°	12117	51239	224643
155°	23699	85323	368239
160°	50946	129514	464024
165°	100196	188003	432809
170°	192498	269523	380449
175°	324479	356573	388606

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 0°  
 Luminance: 0 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.1	0.0
100°-110°	1.2	0.3
110°-120°	3.4	0.9
120°-130°	7.2	1.9
130°-140°	18.1	4.8
140°-150°	49.7	13.1
150°-160°	112.1	29.5
160°-170°	124.2	32.8
170°-180°	63.3	16.7
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	0.0	0.0
90°-120°	4.7	1.2
90°-150°	79.7	21.0
90°-180°	379.0	99.9
0°-180°	379.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
90°	0	0	0	0	0	
95°	0	0	0	0	0	0
105°	1	1	1	1	1	1
115°	3	3	3	4	5	3
125°	4	5	6	10	14	4
135°	6	8	14	34	54	5
145°	12	17	48	133	191	8
155°	44	62	157	408	676	22
165°	196	237	368	644	847	56
175°	655	672	720	766	785	54
180°	804	804	804	804	804	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	1.0	1.0
105°	1.0	1.0	1.0	1.0	1.0
107.5°	2.0	1.0	1.0	2.0	2.0
110°	2.0	2.0	2.0	2.0	3.0
112.5°	2.0	2.0	2.0	3.0	4.1
115°	3.0	3.0	3.0	4.1	5.1
117.5°	3.0	3.0	4.1	5.1	6.1
120°	3.0	4.1	4.1	6.1	8.1
122.5°	4.1	4.1	5.1	8.1	12.2
125°	4.1	5.1	6.1	10.1	14.2
127.5°	5.1	5.1	8.1	14.2	19.2
130°	5.1	6.1	9.1	19.2	26.2
132.5°	6.1	7.1	11.1	26.2	37.4
135°	6.1	8.1	14.2	34.3	53.6
137.5°	7.1	10.1	19.2	49.5	76.9
140°	9.1	12.2	26.2	69.8	98.0
142.5°	11.1	14.2	35.4	96.0	139.6
145°	12.2	17.2	47.5	133.5	191.1
147.5°	15.2	21.3	65.7	181.0	276.0
150°	21.3	30.4	89.9	236.6	394.3
152.5°	29.3	42.4	120.3	317.4	531.9
155°	43.5	61.7	156.7	408.5	676.4
157.5°	64.7	87.9	200.3	501.5	809.9
160°	97.0	128.4	246.7	578.4	883.8
162.5°	140.6	177.0	301.3	623.9	890.9
165°	196.2	236.6	368.1	644.1	847.3
167.5°	274.0	314.5	441.8	655.2	787.6
170°	384.2	423.7	538.0	678.4	759.4
172.5°	520.7	554.1	638.0	723.9	765.5
175°	655.2	672.4	720.0	766.5	784.6
177.5°	757.4	764.4	774.6	787.6	793.7
180°	803.8	803.8	803.8	803.8	803.8

(END OF REPORT)